

LIFELONG LEARNING IN THE CONTEXT OF ENHANCING THE QUALITY OF LIFE

Jana Matochová¹, Petra Kowaliková²

Abstract

The quality of life is a multidimensional concept and usually expresses a subjective assessment of self-satisfaction with life. At a higher age there are differences in intellectual performance, there is a decrease in the availability of mental activities, and memory deficits. Lifelong learning at third age universities may be an appropriate prevention, but also a protective factor of active aging. The aim of the paper is to identify and interpret partial indicators of the quality of life in relation to the process of lifelong learning, focusing on the specifics of seniority. The theoretical backgrounds are based on the psychological interpretation of the term quality of life and social demographic analysis of the living conditions of seniors in the context of the institutional framework of lifelong learning in the Czech Republic. The research findings are supported by relevant statistical data and illustrated by the outcomes of the survey among education participants.

Keywords:

quality of life
lifelong learning
senior
university of the third age

1 Introduction

In the society with a high level of education, the process of lifelong learning is a prerequisite asserting oneself in the social context, not only in the labour market. With the increasing influence of information and communication technologies and the transition to industry 4.0, continuous education becomes a prerequisite for finding employment, but also a condition for unrestricted access to information, establishing and maintaining social ties.

In addition to the emphasis on lifelong learning, the current social development is characterized by significant demographic changes that are reflected in the living conditions and lifestyles of all generations, and with respect to the globalization process, all advanced countries are affected. One of the growing demographic trends is the process of the population aging, i.e. the prolongation of the average life span (supplemented by a complementary phenomenon of relatively low birth rates).

The trend of prolonging the average life span has been evident especially since the 1990s. Between 1996 and 2016, life expectancy at birth increased by 5.8 years for men and 4.8 years for women. This dramatic increase within the period of twenty years had not been common in history. For comparison, between 1966 and 1986, the life expectancy for men increased only marginally (by 0.2 years) and for women by less than one year (0.9 years). At present, life expectancy is 82 years for women and 76 for men. A decrease in mortality rates in the 50-54 to 70-74 age brackets for men and women aged over seventy are most likely to prolong life expectancy. Statistical data further show that more than half of men and women live to a higher age than the average life expectancy at birth. (Statistika&My - Statistics&Us, 2018)

Lay and professional public discussions on the subject of population aging have two lines and each is, in a specific way, reflected in the public image of the elderly, which has changed significantly over the last few decades. The prospect of prolonging life expectancy points to the quality and affordability of health care, the

¹ VSB-Technical University of Ostrava, 17. listopadu 15/2172, 708 33 Ostrava – Poruba, Czech Republic.
Corresponding author. E-mail: jane.matochova@vsb.cz

² VSB-Technical University of Ostrava, 17. listopadu 15/2172, 708 33 Ostrava – Poruba, Czech Republic.

efficiency of welfare state mechanisms and, in general, to the increasing level of socio-economic living conditions. The economic reflection of social spending points to indicators such as the age index or the economic burden index. The age index (the number of people over the age of 65 per 100 persons under the age of fourteen) rose from 83.1 in 2000 to 117.1 in 2015 and the estimated value in 2065 is 243.6. It is estimated that the economic burden index will rise significantly (the ratio of the number of children and seniors to the population of the economically active age, i.e. the number of persons under the age of 14 and the number of persons over 65 years per 100 persons aged 15-64), from the present value of 59 to the value 100 in 2065. (CSO -Czech Statistical Office, 2014)

A tendency to a simple increase in the economic burden index is not as significant as a change in the structure of dependent people in favour of increasing the number of people in the post-productive age, which is linked to the increased burden on the social system (social expenditure per senior citizen is higher than per a child under the age of fourteen). Because economic indicators appear to be relevant in today's individualistic and performance-oriented society, the public image of seniors' age is distorted by them to a large extent. The aging of the population, which actually manifests itself as the growing economic burden of the economically productive population, does not only involve an increasing life expectancy, but also a relatively low birth rate, or fertility. Total fertility in the Czech Republic is in the long run between 1.5-1.7 children per woman; it is below the reproductive rate of the population, which is 2.1 children per woman and was last achieved in 1980. (CSO, 2017a)

Excluding economic indicators, with the increase in the share of senior citizens, the question arises as to how to adapt social systems (not just health and social security systems, but also education systems or the labour market) to this demographic phenomenon effectively and how to ensure an acceptable quality of life for this growing age category.

2 Quality of life

Defining the quality of life is very difficult. The definition of the quality of life is based on Maslow's theory of needs, i.e. the fulfilment of basic physiological needs (the need for food, sleep, relief from pain) and is a prerequisite for updating and satisfying more subtle needs (the need for safety, the need for close relations, the need for self-esteem). There are currently a number of definitions of the quality of life, but none seems to be universally accepted. However, they have one thing in common, namely that the quality of life should include data on the physical condition, mental health, and social condition of an individual. To a certain extent, the quality of life depends on the level of physical and mental activity and work performance, and the level of physical, mental and social well-being, but above all, on the level of personal satisfaction and the enjoyment of life, despite its misery and difficulty. The quality of life is seen as a multidimensional variable and is usually defined as "subjective assessment of one's own life situation". It includes not only the feeling of physical health, but also the mental health, asserting oneself within the social context, religious and economic aspects, etc. The term of quality of life is connected with the ability to live a socially and economically productive life. M. Pacione (2003) states that the quality of life can be determined by two dimensions:

- the conditions people live in. This dimension is understood as an objective, environmental and spatial one,
- how people experience their lives. This dimension is understood as subjective – psychological.

For the objective assessment of the quality of life, concrete, measurable living conditions are needed. Since 1990, the objective quality of life in more than 150 countries has been monitored annually by the United Nations Development Programme. According to it, the ranking of countries according to the Human Development Index (HDI) is published every year. The Human Development Index is a composite indicator of average success in the key dimensions of human development: long and healthy life, knowledge and decent living standards.

For subjective assessment of the quality of life, cognitive assessment and emotional experience of one's own life, which may not be in direct proportion with the socio-economic status, and even with biological health, (Heřmanová, 2012, p. 42).

In essence, it can be said that when assessing the quality of life, it is a complex of dimensions of human life and the conditions of their achievement. This complex and multidimensional concept of the quality of life implies a wide range of concepts used to express quality of life. The main components of most definitions of the quality of life and indicators of the individual quality of life in a relationship are well-being and satisfaction

in different areas of life. The expectations and their fulfilment are the determining factor of life satisfaction. The quality of life can be understood as the difference between expectation and what one actually achieves. The smaller the difference, the higher the quality of life (Tokárová, 2002).

2.1 Quality of life for the elderly

Great attention is now devoted to the quality of life of the elderly. The senior citizen age is characterized by the reduction of social contacts, the loss of friends. The active working age is decreasing, physical health is deteriorating, physical pain is increasing. The elderly are more aware of the fact that their life expectations have not been fulfilled, either in their own family or in social relationships, or of subjective dissatisfaction with themselves. Nowadays, surveys of the senior citizens' quality of life focus on their overall satisfaction with life. Satisfaction with family, housing, work, self-realization, with their social ties, social recognition. The most important factors determining the subjective feeling of happiness and satisfaction, meaningful life are determined. At present, when examining the quality of life, attention is drawn to the subjective aspects of these areas of life:

- limitations in social activities,
- limitations in physical activity due to health problems,
- limitations in normal activities due to physical health,
- physical pain,
- mental health,
- limitations due to emotional reasons,
- vitality,
- general feeling of health.

The question of research or the identification of the subjective assessment of the currently experienced respondents' lives is sensitive and methodologically complex. Researchers often encounter the problem of respondents' willingness to self-reflection and the provision of true information in relation to self-reflection. Another problem is the mutual relation of the subjective quality of life with the continuously changing values of the respondents and society, especially in terms of time (Heřmanová, 2012, p. 43).

Firstly, in order to ensure material conditions, both to ensure a sense of social usefulness and self-realization even in mature years, a number of senior citizens currently remain active labour market participants.

3 Quality of life

The share of the employed in the total population aged 60-64 has doubled between the years 2000 and 2015 from the original 17% to 34%. For men, the share of the employed rose from the initial 23% to 48%, for women from the original 11% to 22%. The causes of this phenomenon are both the shifting of the retirement age and the gradual increase in the level of education in this age category. People with higher education are expected to stay longer in the work process. A slight increase in the employed was also recorded in the age category over 65, from 4.0% to 5.6% in 2015. In all age groups, the proportion of men employed is higher than that of women employed. (CSO, 2016)

Older male categories are most represented by legislators and executives (40% of employees in these sectors are aged 45-59), by skilled workers in agriculture, forestry and fishing, repairers and craftsmen (35% of employees are aged 45 -59 years). The age group of 60 and over is most represented by legislators and executives (12%) and by service and sales staff and specialists (10%). Women aged 45-59 find employment most often among skilled workers in agriculture, forestry and fishing (50%). They are often represented by legislators and executives on the one hand and between auxiliary and unskilled workers on the other hand (44% in both classes of employment). Women aged sixty or more work most often in agriculture, forestry, fishing, and as auxiliary and unskilled workers (8% in both employment classes). (CSO, 2016)

The socio-economic conditions of life of women and men in the senior citizen age vary significantly. The difference is due both to a significantly higher life expectancy for women and to a different amount of old-age pension, which is tied to the different wages in the period of economically active life.

Regardless of education, the wage of women is lower than that of men. Women – more often than men – work as employees in services, and these positions are associated with a lower average wage (average gross monthly wage of workers in services and sales is one third lower than the average gross wage of technical and

professional workers). The pay gap also reflects the period of decline in the economic activity rate of women aged 20 to 34, or 39 due to maternity and parental leave. Twenty to thirty percent less women than men are economically active at this age. Women also do not hold leading positions in the organizational hierarchy that are associated with higher average wages to the same extent as men.

The relative median wage gap of men and women relative to the median wage of men is referred to as Gender Pay Gap (GPG) and is expressed as a percentage. In the case of secondary education without a secondary school-leaving certificate (men predominate among the population with this type of education), the GPG value is 27% to the detriment of women, in the case of secondary education with a secondary school-leaving certificate (women predominate among the population with this type of education), the GPG value is 17.4% and in the case of higher education, it ranges between 21% (for Bachelor's and higher degrees in technical studies) and 23% (for five-year and longer completed studies). (CSO, 2016)

The GPG is reflected in the amount of the old-age pension. Women retire earlier than men. Pensions up to CZK 10,999 are more often received by women. Men are predominant among pensioners receiving over CZK 11,000. The proportion of women among recipients of pensions up to CZK 9,999 is 83%, pensioners receiving over CZK 12,000, women represent only 30%. The highest proportion of women is among the pensioners receiving between CZK 8,000 and 8,999 (more than 86%) and the lowest among the pensioners receiving between CZK 15,000 to 15,999 CZK (12%). (CSO, 2016)

These statistics show that especially women at the senior citizen age are at social risk of insufficient financial security. The amount of their old-age pension is lower, given the life expectancy they depend on receiving it longer and – again, taking into account the life expectancy of men and women – they spend the end of life without a partner. They are often at risk of income poverty and material deprivation.

3.1 Social support for the elderly

The quality of the senior citizens' lives can be assessed from the perspective of different ties that are comparable to the hierarchy of human needs. It is the autonomy and self-sufficiency of the elderly, the sense of usefulness for others, the absence of pain, the ability to make decisions, a certain financial standard, a certain degree of happiness, morals, living space, etc. The quality the senior citizen's life is connected with the feeling of self-realization, creative personality development, , the need to build on multilateral interpersonal relationships. An important factor in evaluating the subjective quality of life is social support.

Social support is one of the most important mental health protectors. It can be realized through friends, family, a close person to whom s/he can trust and whom s/he can rely on. The marriage relationship, according to some researchers, has a special value especially for men. Men, according to these experts, suffer more from the loss of a wife and the loss of benefits resulting from marriage. According to Křivohlavý (2009), in connection with being widowed, the first six months after the loss of spouse are extremely critical, especially for men. Women generally have wider and more intense social contacts with other women, and also with children, grandchildren, and great-grandchildren. Men live rather lonely after being widowed. They suffer from depression more often, develop various bad habits (alcohol consumption, smoking), health problems get worse, and similar troubles occur. Marriage brings a certain amount of advantages within maintaining good health, promotes healthy behaviour, improves domestic economic conditions, and provides emotional and social support that is an important factor for successful aging. At the same time, it helps to maintain the positive state of subjective well-being.

For elderly people, changes occur in the intellectual performance. In older age, there is a gradual decline in the availability of psychological activities, which has an impact on cognitive functions. Cognitive examinations of elderly people using fixed and flexible neuropsychological test batteries show that episodic memory naturally deteriorates with age (Nikolai et al., 2016). In particular, it is significantly impaired in individuals with Alzheimer's disease (ACH), the most common neurodegenerative disease of the elderly. Unlike younger people, the ability to quickly memorize and recall what has just been learned decreases with age. The advantage, however, is that older people are able to keep in mind knowledge that they are able to connect with their experience, knowledge and, in general, see it in context. Limiting memory functions affects learning ability. However, one of the ways to actively live and prevent social isolation is a continuous, lifelong learning.

4 Quality of life

If we focus on the transformation of the educational structure for the age group of 60 or more, which was characterized by a relatively high proportion of elementary education (40% in 2000, but only 19% fifteen years later), it is obvious that it is copying the overall social trend toward increase in the share of secondary and university educated people. The percentage of people in this age group that achieved secondary education with a secondary school-leaving certificate in 2015 was 41% (32% in 2000), and 11% of people aged sixty and over (7% in 2002) had university education. (CSO, 2016)

The share of university educated people aged 55-64 is 15.5% in the Czech Republic, which is almost seven percent less than the average share of university educated persons of that age in the European Union. On the contrary, the share of people with secondary education aged 55-64 is the highest in the Czech Republic compared to the EU countries. A secondary school-leaving certificate or a certificate of apprenticeship was obtained, and post-secondary and follow-up studies were completed in the given age category by 74.1% of Czechs. (CSO, 2016)

Effective prevention of social isolation and, in essence, a prerequisite for an active approach to obtaining information is computer and digital literacy, which includes information skills (searching for information, work with files and repositories, etc.), communication skills (communication via e-mail, social networks etc.), problem solving skills (installation and change of software and application settings, etc.), familiarity with online services (online purchasing and selling, internet banking, etc.), software skills (using a text editor, photo and video editing software etc.).

An international comparison shows that in the Czech Republic, 27% of people aged 55-64 have basic digital skills, which is higher than the average for the European Union (24%). An advanced level of digital skills is reported by 9% of people in this age category, while the EU average is 15%. Digital technology in the Czech Republic is not used by 31% of people at that age (Table 1).

	Low digital skills	Basic digital skills	Advanced digital skills	No digital skills	Have not used the Internet for 3 months
Norway	25	36	35	0	4
Denmark	26	36	34	1	4
Luxembourg	19	42	33	1	5
United Kingdom	33	27	30	1	8
Sweden	36	33	27	0	4
Netherlands	24	42	26	1	7
Finland	36	34	22	1	8
Germany	30	35	18	0	16
EU28	30	24	15	1	30
Belgium	33	29	15	0	22
Austria	23	33	15	2	28
France	36	24	14	1	25
Spain	30	19	13	3	35
Hungary	33	22	12	0	33
Estonia	42	22	11	1	24
Ireland	37	14	10	2	37
Italy	22	20	10	3	45
Czech Republic	32	27	9	1	31
Croatia	25	19	9	1	46
Slovakia	33	19	9	0	38

Finland	27	15	8	2	48
Portugal	26	13	7	1	53
Cyprus	27	11	6	2	55
Greece	24	13	5	1	58
Poland	29	13	5	1	50
Bulgaria	25	9	4	1	61
Romania	24	9	3	:	65
Turkey	14	3	3	1	79

Table 1: Digital skills for people aged 55-64 in the selected EU countries. Source: Czech Statistical Office (CSO, 2017b).

In the 65-74 age group, only 2% of the population in the Czech Republic (7% in the EU) show advanced digital skills, 15% of Czechs aged 65-74 have basic skills (Table 2).

	Low digital skills	Basic digital skills	Advanced digital skills	No digital skills	Have not used the Internet for 3 months
Luxembourg	16	40	32	2	11
Denmark	36	33	16	2	13
United Kingdom	32	28	15	1	23
Sweden	38	31	14	1	15
Netherlands	29	37	13	0	20
Finland	36	25	10	2	26
Norway	46	30	10	0	14
Belgium	29	23	9	0	39
France	31	19	9	1	40
Germany	29	25	8	0	38
EU28	24	17	7	1	51
Austria	23	22	6	0	49
Malta	24	6	5	3	62
Estonia	34	12	4	2	49
Spain	19	9	4	2	65
Finland	13	11	4	1	71
Italy	13	9	3	2	73
Hungary	22	12	3	0	63
Portugal	16	8	3	1	72
Czech Republic	26	15	2	1	56
Slovakia	24	12	2	1	62
Greece	11	3	1	1	84
Croatia	10	5	1	1	82
Poland	16	7	1	1	74
Bulgaria	11	2	0	0	87
Romania	12	2	0	:	85

Table 2: Digital skills for people aged 65-74 in the selected EU countries. Source: Czech Statistical Office (CSO, 2017b).

For many senior citizens, the study of interest can contribute to evaluate the knowledge and skills to date, to improve psychophysical fitness, a sense of self-worth, self-realization, and to prevent a sense of "brain inaction". It is nowadays realized through lifelong learning – a university of the third age. While studying at third-age universities, seniors can engage in various programmes in memory training to prevent cognitive

function impairment. The programmes positively affect the cognitive function of the elderly and promote mental well-being. The interpretation itself, the presentation, supports the perception of the participant, acts on the focus of attention, forces him/her to think, associate, connect new knowledge with the ones long-stored. Solving possible tasks during the exercise promotes creativity, decision making, collaboration, increases activity and stimulates interest. These include, but are not limited to, traditional study duties such as continuous repetition of the subject matter, reading of books and processing their abstracts, preparing for the presentation, learning new languages, etc. It is clear from the above that even the study in older age is not an obstacle to the memory, but it is an activation tool itself. In addition, intensive brain exercises can prevent age-related illnesses. Equally important, however, is sufficient motivation to learn and study as such – without it, it is really hard to learn new things.

4.1 Social support for the elderly

An important stage in the development of third-age universities in Europe began in 1973 with the founding of the first U3A university of in the university campus. European countries have thus become involved in the development and anchoring of the educational process at universities, towns, municipalities, regions, cultural centres and other formal and informal groups. Geographically, this model began to shift from Western Europe to Central and Eastern Europe. In this sense, it is an institutional anchor of the senior citizens' education. The French model of this anchor talks about senior citizens' education at universities, while the English model on education deals with education outside universities. Education takes place in cultural centres, libraries, municipal and city council offices, primary and secondary schools or other facilities. From the point of view of lecturing and staffing, the instruction is ensured by teaching staff, professors teaching at universities, lecturers with pedagogical education, educators with a minimum level of competence in pedagogy. From the point of view of management, they are professional employees of universities, but also voluntary organizers of the senior citizens' education.

The organization of the third-age university imitates the organization and timetable of the academic year, includes the usual rituals and ceremonies (matriculation, graduation), reflects the usual lecture form of teaching, besides which it includes excursions, or possibly participation in cultural events. The university of the third age is a real study with fixed assignments and deadlines for their submission. A prerequisite for participation in this form of learning is most often age with lower limits ranging from fifty to fifty-five years, the upper age limit is not fixed, and completed secondary education (some universities of the third age, however, allow the participation of persons with basic education). The students of third age universities include more frequently women than men. This can be partly attributed to higher life expectancy for women (while under the age of 59 years, the proportion of men in the population increased, after the sixtieth year of age, their percentage decreases) as well as their generally higher sociability shown by women across all age categories. Graduation conditions typically include participation in attendance and fulfilment of the assigned tasks.

Third-age universities are interest-based educational institutions that are in line with the educational concept of lifelong learning in the Czech Republic. Their mission is to make current knowledge in selected fields available in a suitable way, enabling also for citizens who, for various reasons, cannot be involved in everyday active life to participate in the development of the society, education, science and technology. The mission of universities of the third age is to contribute to securing the rights of older people to education, contribute to expanding their horizon, increasing knowledge, providing the latest information in the field of science and social events, help integrate into society in the new conditions that arise due to retirement, contribute to improving the psychophysical condition of the senior citizens.

The university of the third age provides people at a later age with general, interest and non-professional education at an university level. Students have the opportunity to get acquainted with the latest knowledge in different areas of life at an academic and university level. They can acquire a range of knowledge that is important to them in view of the current development of science and technology and new knowledge in the fields of their interest.

In addition to acquiring or expanding knowledge and skills from a variety of scientific disciplines, universities of the third age also provide the development of computer and information literacy either in the form of separate courses or indirectly through teaching organization, communication with teaching staff and administrative staff of universities, or through assigned tasks that assume using information and communication technologies. This is also contribution of universities of the third age in adapting senior citizens to increasing technological requirements for asserting themselves in the social context and engagement in the contemporary society.

A research survey was carried out in June 2017 to identify the motivation and needs in education for students of the third-age university. The research group was made up of students of the third-age university at VŠB – Technical University in Ostrava aged 56-81. A total of 85 respondents from 98 addressed students participated in the survey. The basic research method consisted of a structured questionnaire that included open and closed questions, and the structure of the questionnaire questions was arranged in accordance with the objectives and established research hypotheses. The generated questionnaire contained 18 items. All respondents answered the questionnaire in the presence of at least one of the researchers. The research was based on quantitative methodology using the mathematical-statistical method. The results of the research show that the learners had different motivations to study. Here are the most common ones:

- “We did not want to stop developing and sit at home.”
- “We wanted to go somewhere with my husband, meet people, and then we talked about the study matter with my husband at home, we compared who is doing better in which.”
- “I did not have the opportunity to study in my youth, I got it now, so I signed up.”
- “I still need to rack my brains not to stop developing.”
- “I will not allow my brain to retard.”
- “I wanted to expand my horizons.”

Another survey, from the field of evaluating the third-age university studies as a whole, has shown that this experience is a welcome change for the elderly who have joined in lifelong learning. It is not only about the possibility of experiencing active aging, but also about preventing social isolation and “stopping developing”. Here are the most frequent answers of U3A students:

- “I am so glad we could attend the university of the third age with my husband, even if we studied different fields. I admit that I had doubts at first. Today I see an interesting process that has pushed me and my husband forward. After each lecture we talked, and I learned a lot of new things.”
- “My comfortable life has changed a lot. It was a great experience for me.”
- “The lectures were very interesting. And the completion of the studies with the graduation ceremony too.”
- “A good bunch formed there, we were entertained and learned a lot about nature, minerals ...”
- “I think U3A is a wonderful thing. I am 68 years old. I do not feel lonely, I still work with a work contract, but you can refine your memory there all the time, get new knowledge, and get to know new people. As long as one is able to participate in such activities, it brings him joy and satisfaction, and he will not be old even in his 80s”
- “We chose our own topics, we ended each semester with a ceremony. I am already thinking about another course. It was a great experience.”
- “We got a “Certificate” and we even had a “graduation ceremony” – we all had a wonderful experience, I have a nice memory of it.”
- “I found new friends, and mainly involved the brain. I really recommend this to everyone. It is just interesting that there are more women there. I am 73 years old, and I have collected a number of diplomas.”
- “I especially needed a good relationship with other people (some of my friends disappeared and there were few of them left), so just for the opportunity to attend a group of people with similar interests and to exchange not only the information but also the feelings, it was very important for me”.
- “I liked it, it was interesting, a lot of new knowledge.”
- “I strongly recommend! I and all my men and women colleagues (65-75 years) have been conscientiously preparing for the lessons, and we were rightly praised by the professors. I personally think it is the best way to train your memory. The brain needs it and it really works.”

5 Conclusion

In today's society, the process of lifelong learning is a prerequisite for asserting oneself in the social context. With the prolongation of life expectancy, educational opportunities also develop for senior citizens. In addition to the possibility of active return to the labour market and the increase in material security, further education is an opportunity for senior citizens to experience active aging, to prevent social isolation, to improve their own psychophysical condition, and to encourage self-esteem and self-realization.

The goal of the third-age university is not only to meet the educational needs of senior citizens, but also social needs. Third-age universities offer the opportunity to expand their knowledge and skills, support the development of computer and digital literacy, make it easier for older people to adapt to the latest information and communication technologies, whose dominance is a prerequisite for active social life. Attending lectures allow contact with similarly-minded people and those close in terms of age, open up space for new friendships, and create a high-quality opportunity for senior citizens' leisure time. It is a very effective way to achieve good quality of life and active aging.

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